

ABSTRACT

5       A cylinder air filling amount is divided into a  
first amount of air and a second amount of air, the first  
amount of air and the second amount of air are calculated,  
and the first amount of air and the second amount of air  
are totaled to calculate a cylinder air filling amount.  
The first amount of air is the excess of the cylinder air  
filling amount with respect to the throttle valve air  
10       passage amount occurring due to an intake stroke being  
performed. The drop in intake pressure occurring due to  
an intake stroke being performed is detected for each  
cylinder and the total value of the intake pressure drop  
in a 720° crank angle range is calculated. The first  
15       amount of air is calculated based on an intake pressure  
drop and the intake pressure drop total value. Due to  
this, it is possible to simply and accurately calculate a  
cylinder air filling amount.